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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,787	10/19/2001	Takayuki Toshima	199372003600	5431

25224 7590 08/11/2003
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EXAMINER

CULBERT, ROBERTS P

ART UNIT	PAPER NUMBER
1763	

DATE MAILED: 08/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application N .

10/036,787

Applicant(s)

TOSHIMA ET AL.

Examiner

Roberts Culbert

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 31 July 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Attached Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: _____.

Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____.

GREZDAY MILLS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Response to Arguments

Applicant's arguments filed 07/31/03 have been fully considered but they are not persuasive as discussed in detail below.

Applicant has argued that Konuma ozone concentration is irrelevant because the ozone water is applied before etching whereas the applicant has applied the ozone water after the etching step.

The argument is not persuasive because one of ordinary skill in the art would recognize that increasing the degree of wetting would naturally apply to both rinsing and etching as both processes require a uniform coverage that is improved by the hydrophilic surface.

The argument is further not persuasive because Konuma is only cited by the examiner to demonstrate that it is known in the art to use the concentration of 0.1 to 20 ppm ozone water to form a thin oxide on a silicon substrate to increase the wetting as stated by Konuma (Col. 2, Lines 16-22). Konuma is not cited to show the sequence of method steps. The admitted prior art does show that it is conventional in the art to apply the ozone water after etching in order to form a hydrophilic oxidation film.

Applicant has argued that the concentration of the ozone water is critical to the invention because the hydrophilic process (ozone water) allows the substrates to be dried without water marks, while avoiding dissolution of the resist pattern and providing the substrate with an oxidation film having the film thickness required to be hydrophilic.

The argument is not persuasive because the admitted prior art states that the resist is dissolved by IPA-vapor during the drying process. See page 2 of the specification. This indicates that the resist is in place after the ozone water step, and therefore it is known in the prior art to provide a concentration of ozone water that does not dissolve the resist.

Applicant has argued that Kamikawa fails to disclose the hydrophilic process recited in claims 17 and 21.

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The argument is not persuasive because the admitted prior art discloses the claimed feature. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberts Culbert whose telephone number is (703) 305-7965. The examiner can normally be reached on Monday-Friday (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on (703) 308-1633. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

R. Culbert 

August 8, 2003